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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/942,418 | 08/30/2001 | Leping Li | HQ9-98-066US2 | 7371 |
| 32074 | 7590 | 03/13/2006 | EXAMINER | |
| INTERNATIONAL BUSINESS MACHINES CORPORATION DEPT. 18G BLDG. 300-482 2070 ROUTE 52 HOPEWELL JUNCTION, NY 12533 | | | RACHUBA, MAURINA T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3723 | |

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 09/942,418 | Applicant(s) LI ET AL. | |
| | Examiner M Rachuba | Art Unit 3723 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/23/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 14 and 15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 22 June 2005.
2. This application contains claims 14 and 15 drawn to an invention nonelected with traverse in the reply filed 22 June 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 3, 4, 7, 8 and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Aldridge et al, US005787015A. Please refer to figures 3-6 and column 3, lines 47 through column 5, lines 19. Regarding the newly presented limitations “a status light set having at least two lights” and “wherein at least one of the three sets of outputs is to the status light set”, it is the examiner’s position, that as broadly claimed by applicant, ‘015 does disclose the device having a status light set, in the form of the liquid crystal graphic display, the display having more than two lights (the

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light emitting elements), the status lights being the images formed on the display. Note especially figures 3-5. Note that at least one of the outputs is to the display.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aldridge et al, '015. '015 does not disclose that the interface translates between a signal of at least about 0 mA and at most about 20 mA and a signal of at least about 0 V and at most about 10 V, or that the interface also translates at least one of the at least three outputs to a 5V signal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided an interface that translates between a signal of at least about 0 mA and at most about 20 mA and a signal of at

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least about 0 V and at most about 10 V, or that translates at least one of the at least three outputs to a 5V signal since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Here, the range of signal values might depend on the type of input or output device used, and one of ordinary skill would recognize providing a broad range of input and output signals to allow a variety of different devices to be interfaced.

8. Claims 1 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima, US005876265A in view of Aldridge et al '015. '265 discloses a CMP device that uses an interface that translates between and input of first and second voltages to determine an output to the CMP device. '265 does not disclose that the interface accepts at least three sets of inputs and transmits at least three sets of outputs, at least one of the sets of outputs to a status light set having at least two lights. '015, figures 3- 6 and column 3, lines 47 through column 5, lines 19, teaches the use of an interface that accepts at least three sets of inputs and transmits at least three sets of outputs, one of the outputs to a status light set having at least two lights (the liquid crystal digital display device, each liquid crystal cell considered a light). It would have been obvious to one of ordinary skill to have provided '265 with the interface of '015, to allow various other sensing and/or control devices to be used, increasing the versatility of the CMP device, while allowing the operator to check the status of the output devices, column 3, lines 47 through column 5, lines 19.

Response to Arguments

9. Applicant's arguments filed 23 December 2005 have been fully considered but they are not persuasive. Applicant argues that '015 does not disclose or teach at least two status lights, and at least one of the three sets of outputs is to the status light set. The examiner disagrees. Applicant has not claimed any specific light structure, only that there be at least two lights, and that the lights be connected to at least one output. The liquid crystal graphic display is inherently made up of multiple light emitting devices (and are therefore lights) that display the status of the devices 114, 116, 118 and 120 that are providing inputs. As the display is part of the interface, any or all of the outputs from the interface are to the status lights. It is noted that applicant has disclosed a specific status light set on page 7 of the pending specification. However, the examiner is required to give the claim limitations their broadest, reasonable interpretation. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493.

The examiner can normally be reached on Monday-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M Rachuba
Primary Examiner
Art Unit 3723

Handwritten signature of M. Rachuba and date 2/8/06.